#### **Public Information Meeting**

Replacement of
Bridge No. 02197
Route 17A over Carr Brook
Portland, Connecticut







#### **CTDOT Role and Mission**

## **Bureau of Engineering and Construction**

Responsible for engineering design, construction, and inspection of transportation projects

Project Manager: Mr. Louis D. Bacho

Contact: Ms. Mary E. Baker



# Close, Jensen and Miller, P.C. Consultant Liaison Engineers

CTDOT has retained the firm of Close, Jensen and Miller to supervise the activities relative to the design of this bridge project.

**Contact: Mr. Jeffrey J. Fontaine** 

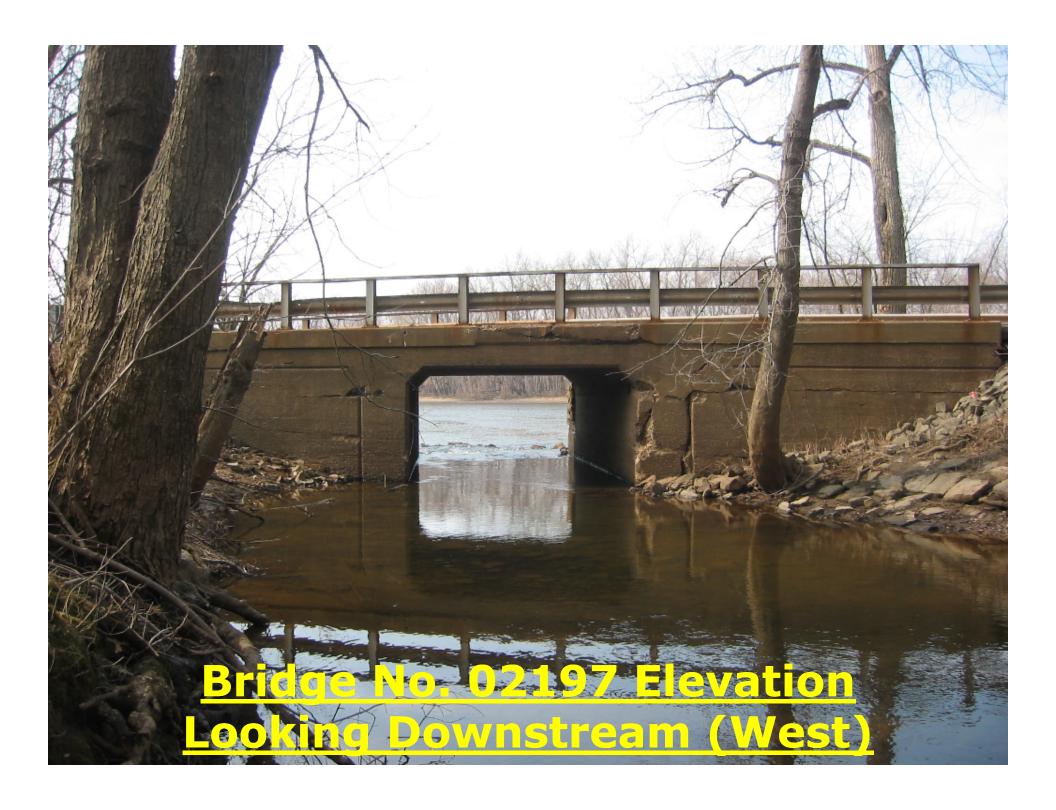


#### **Project Goals**

- Replace Bridge No. 02197
- Minimize disturbance to traveling public
- Complete construction in a timely manner
- Effectively use funds

Address above with consideration for context sensitive design







# Existing Bridge Description Bridge No. 02190

- Single Span, Reinforced Concrete Frame Structure built in 1916
- Supported by Reinforced Concrete Wingwalls (upstream) and Stone Masonry Wingwalls (downstream)
- Structure Dimensions
  - Length = 13.0' Clear Span
  - Overall Width = 25.5'
  - Roadway Width = 23.2'
- Carries one lane of traffic in each direction
  - Estimated Average Daily Traffic (ADT) over the bridge
     ~4,600 vehicles (2010)





#### **Reasons for Project**

Structure recommended for replacement under the State Bridge Program.

- Structurally Deficient:
  - Overall Substructure Condition Rating of "4" poor.
  - Deteriorated condition of the substructure.
- Functionally Obsolete:
  - Existing bridge width curb-to-curb is 23.2 feet
  - A minimum curb-to-curb width of 28 feet is required based upon ADT and roadway classification.

#### **Reasons for Project**

**Extensive cracking at the northeast wingwall** 

**Deterioration along southwest wingwall** 





#### **Reasons for Project**

**Deterioration Culvert Concrete** 

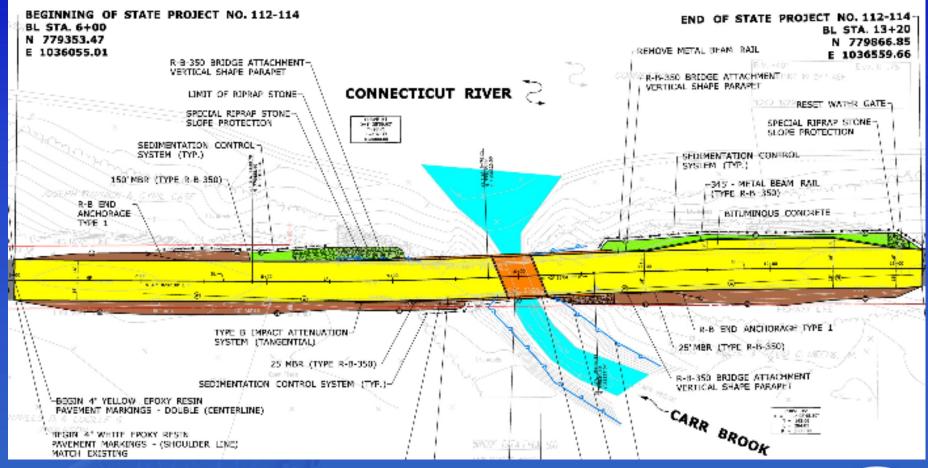
**Large Spall and Exposed Rebar** 





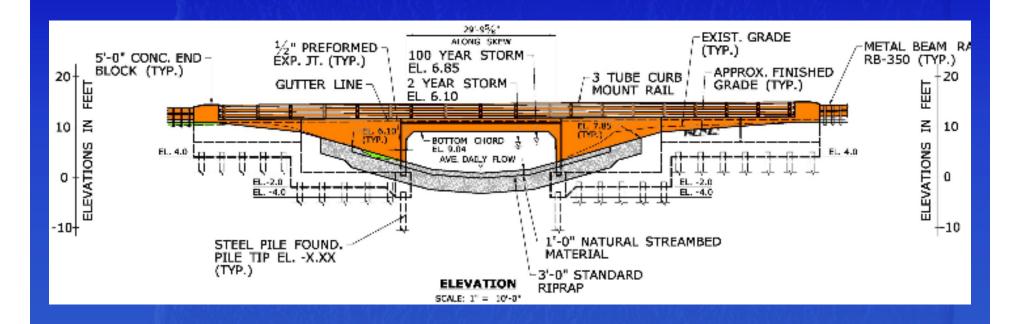


- Bridge No. 02197 will be replaced with a 28-foot clear span precast concrete rigid frame structure founded on pile supported, cast-in-place concrete footings.
- Cast-in-place concrete wingwalls will be founded on pile supported, cast-in-place concrete footings.
- Roadway will contain an 11' wide lane with 5' wide shoulders in each direction (8 feet wider than existing).
- Bridge opening will be larger, however, overtopping due to the Connecticut River flooding cannot be alleviated unless the roadway is raised 8 feet.
- Approximately 500 feet of roadway reconstruction and replacing the existing guide railing with Type R-B 350 to conform with current standards



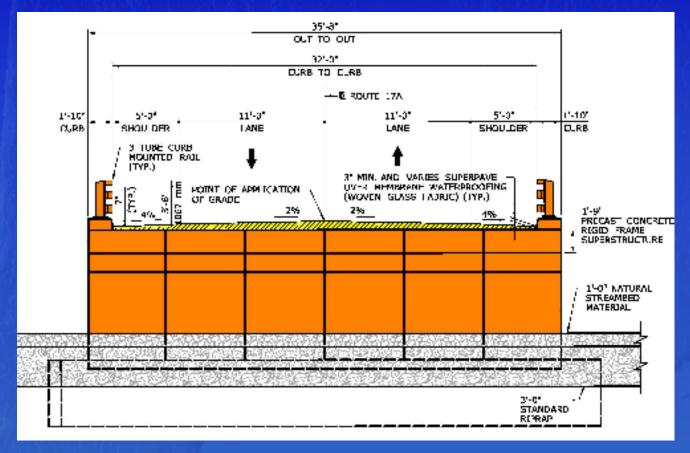
**Bridge Plan** 





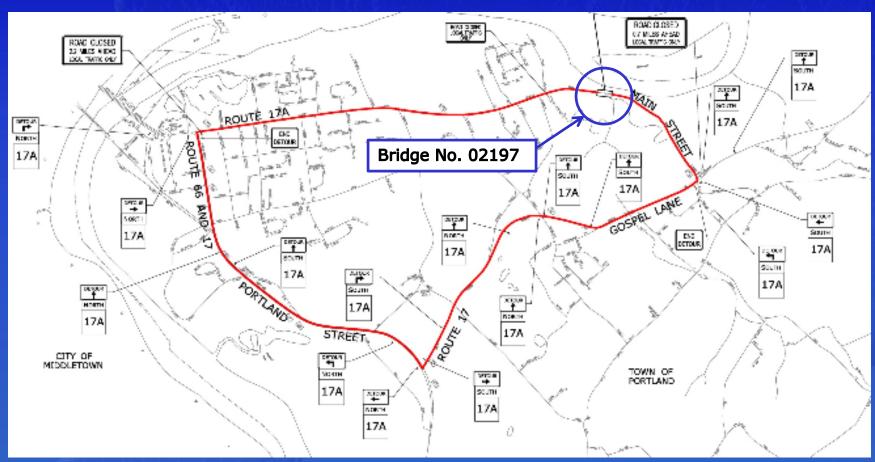
#### **Bridge Elevation**





#### **Bridge Cross Section**





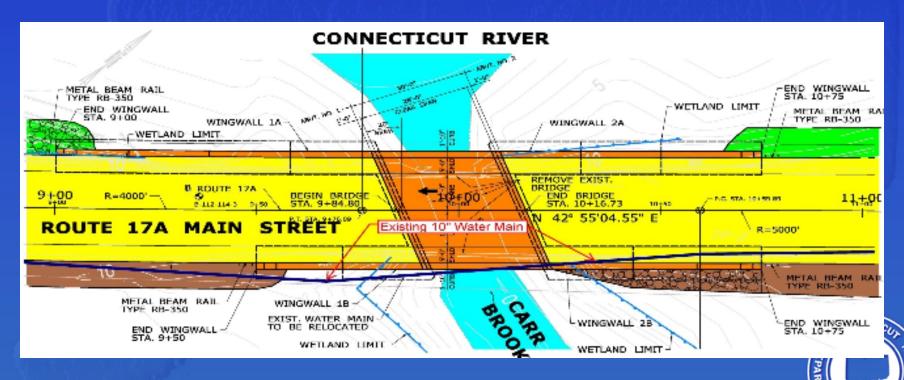
#### **Detour**



#### **Public Utilities**

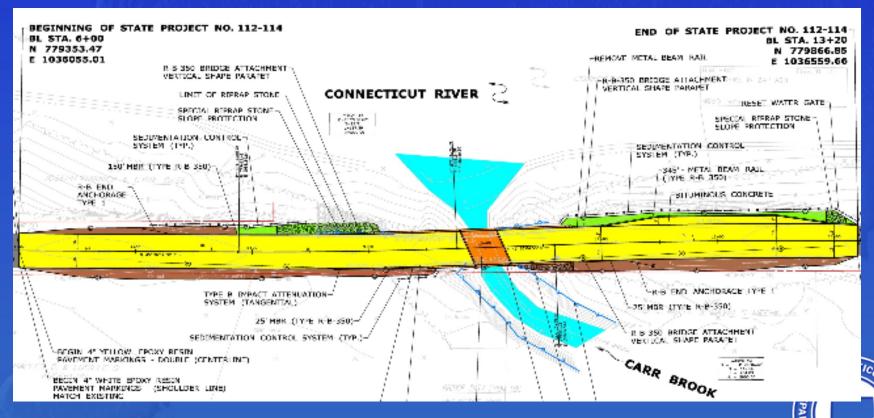
A 10" diameter water main will require relocation for construction.

CTDOT has notified the appropriate utility companies of the scheduled project.



#### Rights-of-Way

Based upon the State boundary map, the anticipated ROW impacts to private property include temporary slope easements and a permanent construction take along the upstream side of the bridge.



#### **Project Cost**

The estimated construction cost for the project is approximately \$2,500,000.

This bridge replacement is anticipated to be undertaken using Federal and State funds.

#### **Project Schedule**

Construction of Bridge No. 02197 is anticipated to begin in the spring of 2014 and be completed in the fall of 2014.

The schedule is preliminary and is predicated upon the receipt of all environmental permits and the availability of funding.

#### **Contact Information**

CTDOT

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### THANK YOU...

# FOR YOUR TIME AND ATTENTION













